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September 26, 2001

HAND DELIVER

Ms. Dawn Tesorero
Technical Enforcement Program
U.S. Environmental Protection Agency
Suite 300
999 18th Street
Denver, CO 80202-2466

SEP 27 2001

Re: First Request for Information Pursuant to § 104 of CERCLA for the Vasquez
Boulevard/I-70 Site, Denver, Colorado

Dear Ms. Tesorero:

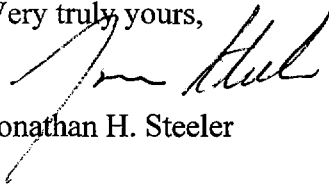
On behalf of Pepsi Bottling Group, the attached is intended to supplement Pepsi Bottling Group's earlier responses to the above-referenced information request. Specifically, enclosed is the following report:

1. Geotechnical Investigation, Truck Wash Building, Pepsi-Cola Facility, 3801 Brighton Boulevard, Denver, Colorado, dated July 25, 2001, prepared by CTL/Thompson, Inc.

This report is responsive to question 9(h) of the original information request.

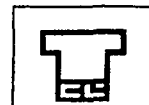
If you have any questions regarding this letter or need further information (including further certification), please advise the undersigned.

Very truly yours,


Jonathan H. Steeler

JHS:jkw
Enclosure
503895

cc: David H. Patrick, Esq.



**GEOTECHNICAL INVESTIGATION
TRUCK WASH BUILDING
PEPSI-COLA FACILITY
3801 BRIGHTON BOULEVARD
DENVER, COLORADO**

Prepared For:

**PEPSI-COLA COMPANY
c/o Mr. Don Patton
9133 Taos Trail
Lone Tree, Colorado 80124**

Attention: Mr. Don Patton

Job No. 33,290

July 25, 2001

**CTL/THOMPSON, INC.
CONSULTING ENGINEERS**

1971 WEST 12TH AVENUE ■ DENVER, COLORADO 80204 ■ (303) 825-0777



TABLE OF CONTENTS

SCOPE	1
SUMMARY OF CONCLUSIONS	1
SITE CONDITIONS	2
PROPOSED CONSTRUCTION	3
PREVIOUS INVESTIGATIONS	3
SUBSURFACE CONDITIONS	5
SITE DEVELOPMENT	5
Truck Wash Building	6
Utilities	6
FOUNDATIONS	7
Drilled Piers Bottomed in Sands and Gravels (North Court Shipping and Receiving Dock)	7
Drilled Piers Bottomed in Bedrock (Truck Wash Building)	8
Laterally Loaded Piers/Piles	10
FLOOR SYSTEMS	12
PAVEMENTS	13
CONCRETE	14
SURFACE DRAINAGE	14
ADDITIONAL INVESTIGATIONS	15
LIMITATIONS	15
FIG. 1 - LOCATIONS OF EXPLORATORY BORINGS	
FIG. 2 - LOGS OF EXPLORATORY BORINGS	
FIG. 3 - LABORATORY TEST RESULTS	
TABLE I - SUMMARY OF LABORATORY RESULTS	



SCOPE

This report presents the results of our Geotechnical Investigation for the proposed truck wash building at the Pepsi-Cola Facility in Denver, Colorado (Fig. 1). We also understand renovations are planned on the east side of the North Court Shipping and Receiving Dock. The purpose of our investigation was to explore the subsurface conditions at the site and provide geotechnical design criteria for the project. The scope was described in our Proposal dated June 4, 2001. Assessment of environmental conditions was not part of the scope.

This report was prepared from data developed during field exploration, laboratory testing, engineering analysis and experience with similar conditions. The report includes our opinions and recommendations regarding design criteria and construction details for foundations, floor systems and slabs-on-grade, pavement and drainage precautions. The recommendations presented are based on our understanding of the construction as currently planned. Revisions of the construction could affect our recommendations. If the construction will differ from descriptions in this report, we should be contacted so that we can provide new recommendations and/or design criteria, if necessary.

SUMMARY OF CONCLUSIONS

- 1. Subsoils encountered in our borings generally consisted of 17 to 21 feet of domestic and construction debris fill underlain by sands and gravels then by comparatively unweathered claystone and interbedded claystone/sandstone bedrock at about 40 feet. Free ground water was found in boring TH-1 at a depth of approximately 26 feet below the ground surface during drilling. Water was measured at a depth of 24 feet several weeks after drilling.**
- 2. We discussed several soil and foundation alternatives including compaction grouting, sub-excavation of the fill, drilled piers, driven piles and footings provided all of the man-made fill is removed. We understand it is desired to found the proposed truck wash building on drilled piers bottomed in bedrock. Ground water was encountered during this investigation and casing will likely be required. Slurry drilling prior to**



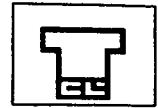
casing may be necessary if caving sands and gravels are encountered. The presence of large gravels may hinder placement of casing in the pier holes. Additional drilled piers bottomed in the sands will be used for the North Court Shipping and Receiving docks. Design criteria for both piers are presented in the report.

3. Floor systems in the buildings should either be structurally supported or a slab-on-grade can be used if all existing fill is removed and replaced by densely compacted fill or if the fill is treated by compaction grouting.
4. Pavements constructed directly on existing fill may settle erratically. We understand pavements placed on the fill in the vicinity of the wash building have performed relatively well. Methods of construction of the parking areas are discussed in the report.
5. Roof drains and sewer lines should be designed and constructed to avoid damage due to settlement; especially under the building.
6. Surface drainage should be designed for rapid runoff of surface water away from the proposed buildings and parking. Water should not be allowed to pond adjacent to the building or on pavements.

SITE CONDITIONS

The Pepsi-Cola Facility is located northeast of 38th Street and Brighton Boulevard in Denver, Colorado (Fig. 1). Existing buildings are located in the south part of the site. The proposed truck wash site is located on the northeastern part of the property in an area currently used for truck parking. This portion of the site is vacant and covered with gravel and some sparse weeds. The proposed building footprint is located adjacent to a fence line. In this area the ground is relatively flat, with total relief of one to two feet, and is at about the same grade as the existing building floors. A small dirt stockpile about 4 to 8 feet high is located south and southeast of the proposed building.

Portions of the land beneath the Pepsi-Cola facility were previously used as a landfill for soil and debris. We understand the fill was placed as landfill in abandoned gravel pits. Debris and soil were encountered in both of our borings.



PROPOSED CONSTRUCTION

We understand the truck wash will be a tall, one-story building. Walls will be pre-cast or site-cast concrete. At-grade paved parking areas and drives will surround the building. Maximum building column loads are anticipated to be light to moderate. The existing site is relatively close to anticipated final grades.

We also understand construction is planned on the North Court shipping and receiving dock and will include installation of new door/wall panels. We understand the existing foundation consists of drilled piers bottomed in the sands and gravels below the land fill. Foundation loads are anticipated to increase from 10,000 psf to 16,000 psf and new piers are planned to support the additional loads.

PREVIOUS INVESTIGATIONS

We have performed numerous investigations at the Pepsi facility. During many of these investigations, landfill was encountered in our exploratory borings. In particular, we performed an investigation (Commercial Testing Laboratories Project No. D-9374) for the Loading Dock area. We recommended drilled piers bottomed in the sands and gravels below the landfill materials to support the structure. Data from this and previous investigations was reviewed and considered in preparation of this report.

SUBSURFACE CONDITIONS

Subsurface conditions at the site were investigated by drilling two exploratory borings at the locations shown on Fig. 1. The borings were advanced using continuous flight auger and a truck-mounted drill rig to depths of 25 and 50 feet. Drilling operations were supervised by our field representative who logged the soils found in the borings and obtained samples. PVC pipe was installed in each hole to allow access to monitor ground water. Graphic logs of the borings, including results of field penetration resistance tests, are shown on Figure 2.



Samples of the soils and bedrock were obtained at regular intervals by driving a modified California drive sampler (2.5-inch O.D.) or Standard split spoon (2.0-inch O.D.) using a 140-pound hammer falling 30 inches. Samples obtained during the field investigation were returned to our laboratory where they were visually classified. Results of laboratory tests are presented on Figure 3 and Table I.

Subsoils found in borings consisted of 17 to 21 feet of soil and debris landfill underlain by clean to silty sands and gravels and then by relatively unweathered interbedded claystone/sandstone bedrock. The fill exhibited erratic resistance to drilling and included clay, sand, gravel, brick, wood, paper and metal. Fill depths of 21 feet were encountered in boring TH-1 in the northwest corner of the proposed building.

Sandy gravel layers were encountered below the fill in both exploratory borings. Selected samples were slightly silty to silty and field penetration resistance tests indicated the gravels were medium dense to dense. Gravel and sand layers ranged from 8 to 18.5 feet thick and were first encountered at depths between 17 to 21 feet. Three samples of the gravel contained 3 to 11 percent silt and clay particles (passing the No. 200 sieve) with moisture contents ranging from 0.7 to 11.6 percent; respectively.

Claystone and interbedded claystone/sandstone bedrock was encountered in boring TH-1 at a depth of 39.5 feet below the existing ground surface, or at elevation 5142.5. Based on field penetration results, the bedrock was hard to very hard.

Free ground water was measured at a depth of 26 feet below existing ground surface during drilling. We returned to the site several weeks after drilling and measured water at 24 feet. Ground water elevations will likely fluctuate with seasonal changes.



SITE DEVELOPMENT

The presence of existing fill at this site will significantly affect construction. All structures, pavements and utilities supported by existing fill will have risk of settlement. It is not possible to accurately estimate the range of settlements which could occur, but literature indicates that settlements on the order of 10 percent of the fill depth (or more) would not be unusual.

The fill and soils penetrated by our exploratory borings can generally be excavated with heavy-duty excavation equipment. We recommend the owner and contractor become familiar with applicable local, state and federal safety regulations, including the current OSHA Excavation and Trench Safety Standards. We believe the fill, gravels and sands will classify as Type C soils. Type C soils require a maximum slope of 1.5:1 for temporary excavations.

The contractor should be aware that in no case should slope height, inclinations, excavations or depths including utility trench excavations exceed those specified in local, state and federal safety regulations. Specifically, the current "OSHA Health and Safety Standards for Excavations" should be followed. We understand these regulations are strictly enforced and if they are not closely followed the owner, contractor and/or his earthwork and utility subcontractors could be liable to substantial financial penalties. Our scope did not include environmental assessment of the fill.

We recommend imported soils be used as fill and consist of "granular" sands and gravels containing 10 to 50 percent silt and clay sized particles (passing the No. 200 sieve). Fill should be moisture treated to within 2 percent of optimum, placed in thin, loose lifts and compacted to at least 95 percent of standard Proctor dry density (ASTM D698).



Truck Wash Building

In a design meeting with representatives from Pepsi, Structural Consultants, Inc. and the M.A. Mortenson Company, we discussed several approaches that can be used to support the structure. One alternative would be to remove all or a portion of the existing fill and replace with moisture treated, compacted fill. Compaction grouting of the man-made fill could also be used to improve stability. We understand use of a drilled pier foundation bottomed in bedrock and a floor designed to span between foundations is desired. If requested, we can provide further information about the other alternatives.

Utilities

Buried utilities will likely be constructed below the building pavement areas. Under the building, we believe hanging the utilities (sewer) from the structurally supported floor is probably best to control risk, settlement of fill will affect the utilities. Pressurized water lines should be brought above the floor as soon as possible. Roof drains should not be directed below the building. Outside the building the most positive approach would be to remove all existing fill below the utility corridors. Partial fill removal may also be considered; we judge removal of at least 3 feet or more below the bottom of the pipe could enhance performance. The risk of settlement and magnitude of settlement will decrease as more of the existing fill is removed and replaced with compacted fill. Placement of one or more layers of geogrid in the fill below pipe could also help. Water lines should be as flexible as practical to reduce risk of leakage. Pipeline couplings should be designed to withstand a vertical strain of 5 percent and a horizontal strain of 0.5 percent. These values can normally be met using flexible couplings, short pipe runs and PVC or Ductile Iron pipe. We recommend that all pipe be laid in a course-grained aggregate bedding which extends to at least the spring line of the pipe.



We recommend utility trench backfill be placed in thin lifts, moisture conditioned and compacted as outlined previously. A representative of our firm should observe backfill placement and compaction, and test compaction.

FOUNDATIONS

The near-surface materials at this site consist of man-made fill to depths of 17 to 21 feet. The existing fill is not suitable to support the building foundations. We understand drilled piers bottomed in bedrock are desired to support the Truck Wash building. Additional drilled piers placed between existing piers can be used to support the additional loads of the proposed additions to the North Court Shipping and Receiving Dock. Design and construction criteria for both piers are presented below.

Drilled Piers Bottomed in Sands and Gravels (North Court Shipping and Receiving Dock)

1. Piers should be bottomed in the sands and gravels below the man-made fill. Piers should be designed for a maximum end pressure of 10,000 psf. Skin friction should be neglected.
2. We recommend piers touch into the sand and gravels below the man-made fill with a nominal 1-foot penetration.
3. Piers should be reinforced their full length and the reinforcement should extend into grade beams or foundation walls. A minimum steel ratio of 0.005 of the pier area using Grade 60 steel is recommended. More reinforcement may be required because of structural considerations.
4. Foundation walls and grade beams should be well reinforced; the reinforcement should be designed by the structural engineer.
5. Piers should have a center-to-center spacing of at least 3 pier diameters when designing for vertical loading conditions, or they should be designed as a group. If it is necessary to have piers in close proximity, please call so that we may provide design criteria for pier groups.
6. Quantity and size of column reinforcement or the size of base plates may dictate the most convenient size of drilled piers. Economy can be achieved by varying the pier length and limiting the number of pier sizes. We recommend a minimum pier diameter of 24 inches. The pier length should not exceed about 30 times the pier diameter.



7. Piers should be carefully cleaned prior to placement of concrete. Concrete should be on-site and placed in the pier holes immediately after the holes are drilled, cleaned and inspected utilizing a "drill and pour" construction procedure. In the borings from our previous investigation, sands and gravels were encountered at depths between 7 to 18 feet. The presence of caving sands and gravels may hinder pier installation. Slurry drilling may be required.
8. Casing may be required. We recommend the use of high slump concrete (6 inches \pm 1 inch) to provide proper consolidation of the concrete and reduce the probability of concrete arching or hanging on the sides of the casing and/or reinforcing steel. The concrete should be designed for the specified strength at the higher slump at the point of placement. At least 5 feet of concrete should be maintained above the ground water level (if encountered) prior to (and during) casing removal.
9. Some pier drilling contractors use casing with an outside diameter equal to the specified pier diameter. This results in a pier smaller than specified, typically on the order of 2 inches smaller. The design and specification of piers should consider the alternatives. If full size casing is desired (I.D. of casing equal to specified pier diameter) it should be clearly specified. If design considers the potential reduction in diameter, then the specification should include a tolerance for a smaller diameter for the bedrock penetration.
10. Some movement of the drilled pier foundation is anticipated to mobilize end bearing. We estimate this movement to be on the order of 1/4 to 1/2 inch. Differential movement may be equal to the total movement.
11. The installation of the drilled pier foundations should be observed by a representative of our firm to confirm the piers are bottomed in the proper bearing strata and to observe the contractor's installation procedures.

Drilled Piers Bottomed in Bedrock (Truck Wash Building)

1. Piers bottomed in bedrock should be designed for a maximum end pressure of 35,000 psf. A skin friction value of 3,000 psf is recommended for the first 5 feet of bedrock penetration, increasing to 3,500 psf for penetration over 5 feet. These criteria can also be used for uplift.
2. We recommend designing the piers for a minimum deadload pressure of 10,000 psf based on the pier cross-sectional area. If the minimum deadload pressure cannot be achieved, the bedrock penetration and length should be increased to compensate for the deficiency, using the skin friction value discussed above.



3. We recommend piers penetrate of at least 6 feet into relatively unweathered bedrock or at least 2 pier diameters, whichever is greater. If piers are drilled from the existing grade, we judge they will be approximately 45 to 50 feet deep.
4. Pier drilling should produce shafts with relatively undisturbed bedrock exposed. If pier walls are smooth in the bedrock, they should be roughened. Excessive remolding and caking of bedrock on pier walls should be removed.
5. Piers should be reinforced their full length and the reinforcement should extend into grade beams or foundation walls. A minimum steel ratio of 0.005 of the pier area using Grade 60 steel is recommended. More reinforcement may be required because of structural considerations.
6. Foundation walls and grade beams should be well reinforced; the reinforcement should be designed by the structural engineer.
7. Piers should have a center-to-center spacing of at least 3 pier diameters when designing for vertical loading conditions, or they should be designed as a group. If it is necessary to have piers in close proximity, please call so that we may provide design criteria for pier groups.
8. Quantity and size of column reinforcement or the size of base plates may dictate the most convenient size of drilled piers. Economy can be achieved by varying the pier length and limiting the number of pier sizes. We recommend a minimum pier diameter of 24 inches. The pier length should not exceed about 30 times the pier diameter.
9. Piers should be carefully cleaned prior to placement of concrete. Concrete should be on-site and placed in the pier holes immediately after the holes are drilled, cleaned and inspected utilizing a "drill and pour" construction procedure. Ground water was encountered at depths between 24 to 26 feet and will likely be encountered during installation. Concrete should not be placed in pier holes containing more than about 3 inches of water. We recommend piers be drilled with a large, heavy-duty drill rig (Williams LDH or equivalent) to facilitate the required bedrock penetration.



10. Casing will likely be required, and slurry drilling prior to casing may be necessary. The presence of large gravels (if encountered) may hinder placement of casing in the pier holes. We recommend the use of high slump concrete (6 inches \pm 1 inch) to provide proper consolidation of the concrete and reduce the probability of concrete arching or hanging on the sides of the casing and/or reinforcing steel. The concrete should be designed for the specified strength at the higher slump at the point of placement. At least 5 feet of concrete should be maintained above the ground water level prior to (and during) casing removal. Casing into the load-bearing skin friction zone is not recommended.
11. Some pier drilling contractors use casing with an outside diameter equal to the specified pier diameter. This results in a pier smaller than specified, typically on the order of 2 inches smaller. The design and specification of piers should consider the alternatives. If full size casing is desired (I.D. of casing equal to specified pier diameter) it should be clearly specified. If design considers the potential reduction in diameter, then the specification should include a tolerance for a smaller diameter for the bedrock penetration.
12. Some movement of the drilled pier foundation is anticipated to mobilize skin friction. We estimate this movement to be on the order of 1/4 to 1/2 inch. Differential movement may be equal to the total movement.
13. The installation of the drilled pier foundations should be observed by a representative of our firm to confirm the piers are bottomed in the proper bearing strata and to observe the contractor's installation procedures.

Laterally Loaded Piers/Piles

Several methods are available to analyze laterally loaded piers. With a pier (or pile) length to diameter ratio of 7 or greater, we believe the method of analysis developed by Matlock and Reese is most appropriate. The method is an iterative procedure using applied lateral load, moment, vertical load and pier diameter to develop deflection and moment versus depth curves. The computer program LPILE developed by Reese can be used to calculate deflections for the various pier diameters and loading conditions anticipated by the structural engineer. Moment versus depth curves are developed from these analyses to aid the structural engineer in optimizing the location of reinforcement (the maximum reinforcement can be placed in the zone of maximum



moment and is not required for full pier length). Suggested criteria for LPILE analysis are presented in the following table.

EXISTING SOIL INPUT DATA FOR "LPILE"

	Existing Construction Debris Fill	Compacted Fill	Sands Above Water	Sands Below Water
Density (pci)	0.05	0.07	0.07	.035
Cohesion, C (psi)	2	0	0	0
Friction Angle, ϕ Degree	0	35	35	35
ϵ_{50} (in/in)	0.02	--	--	--
k_s (pci)	50	90	90	60
k_c (pci)	--	90	90	60

The ϵ_{50} represents the strain corresponding to 50 percent of the maximum principle stress difference. The modulus of subgrade reaction for static (k_s) and cyclical (k_c) conditions are used by the program to generate the slope of the initial portion of the "P-Y Curves."

Other procedures require input of a horizontal modulus of subgrade reaction (K_h). For purpose of design, we believe the soil types can be assigned the following values:



Existing Fill	$K_h = 5/d \text{ (tons/ft}^3\text{)}$
Compacted Granular Fill	$K_h = (20 \times z)/d \text{ (tons/ft}^3\text{)}$
Sands (above water)	$K_h = (12 \times z)/d \text{ (tons/ft}^3\text{)}$
Sands (below water)	$K_h = (9 \times z)/d \text{ (tons/ft}^3\text{)}$

Where z = depth (ft), and
 d = pier diameter (ft)

Piers in-line with the direction of lateral loads should have a minimum spacing of 8 diameters (center-to-center) based upon the larger pier. If a closer spacing is required, the modulus value should be reduced. For a spacing of 3 diameters, the effective modulus can be estimated by multiplying the recommended modulus by 0.5. This is for two piers in a row; for more than two piers the reduction factor is 0.25. Linear interpolation can be used for spacing between 3 and 8 diameters. For two piers at 2.5 diameter spacing a reduction factor of 0.40 can be used.

FLOOR SYSTEMS

We believe there is high risk of excessive movement and destructive cracking of slab-on-grade floors on the existing fill. If all existing fill is removed and replaced with densely compacted fill, we believe the risk of excessive slab movement will be low. Slab-on-grade floors can be used provided all fill is replaced or compaction grouting of the fill is performed. If the existing fill is not removed, then the building floors should be designed and constructed as a structurally supported floor. We believe it is acceptable to cast a reinforced "structural" floor directly on the fill and design the floor to span between foundation elements when the fill settles. We understand this type of system is planned.



PAVEMENTS

At-grade parking and drive areas will be constructed around the building. Subgrade soils may consist of compacted fill over existing domestic and construction fill. Pavements will involve high risk of damage due to settlement if placed directly on the existing fill. The risk is mainly associated with erratic settlement of the fill. Settlement can be caused by rearrangement of debris fill, closing of void spaces present in the fill and by decomposition of organic materials. Literature indicates settlement in the range of 10 to 25 percent of domestic waste fill thickness are not unusual. Most settlement usually occurs in the first ten years after landfill placement and the rate of settlement decreases with time. Introduction of vibrations, moisture and new loads can lead to additional settlements.

We understand existing pavements consist of 6 inches of asphaltic concrete placed over 12 inches of prepared base materials and have performed relatively well. We also understand heavy truck traffic will comprise the majority of loads on the pavement adjacent to the truck wash building. If the owner wishes to enhance pavement performance, a portion of the fill could be removed and replaced with compacted fill. If selected, we recommend removing 3 to 5 feet of existing fill below proposed parking lots and replacing it with granular fill (as described in SITE DEVELOPMENT) reinforced with geo-grid. The more fill is removed, the better the likely performance. We can be contacted to discuss options and recommendations.

Our experience indicates problems with asphalt pavements can occur where heavy trucks drive into loading and unloading zones and turn at low speeds. A minimum 7-inch or thicker Portland cement concrete pad can be constructed at dumpster locations and other areas where trucks will stop or turn. The concrete pads should be of sufficient size to accommodate truck turning, and trash pickup.



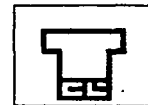
CONCRETE

Concrete which comes into contact with soils can be subject to sulfate attack. Our experience with similar subsoils conditions indicate that water-soluble sulfate concentrations have a negligible exposure to sulfate attack for concrete which comes into contact with the subsoils according to the American Concrete Institute (ACI). ACI indicates Type I or Type II cement can be used for concrete which comes into contact with the subsoils. In our experience, superficial damage can occur to the exposed surfaces of highly permeable concrete, even though sulfate levels are less than 0.1%. To control this, the water to cement ratio should not exceed 0.52 for concrete in contact with soils which are likely to stay moist due to surface drainage.

SURFACE DRAINAGE

Performance of foundations, pavements and flatwork is dependent to a large degree on subsoil moisture conditions. Risk of wetting the foundation soils and pavement subgrade can be reduced by carefully planned and maintained surface drainage. We recommend the following precautions be observed during and maintained at all times after the completion of the structures:

1. Wetting or drying of the open foundation excavations should be avoided.
2. Positive drainage should be provided away from all foundations. We recommend a minimum slope of 10 percent in the first 10 feet away from the foundations in landscaped areas, if planned. Pavements and sidewalks adjacent to the building should also slope for positive drainage away from the building and parking structure(s). Water should not be allowed to pond on or adjacent to pavements.
3. Roof drains should be directed away from the buildings. Downspout extensions and/or splash blocks should be provided at all discharge points. We do not recommend directing roof drains below the floor.
4. Impervious plastic membranes should not be used to cover the ground surface immediately surrounding the building. These membranes tend to trap moisture and prevent normal evaporation from occurring. Geotextile fabrics can be used to limit weed growth and allow for evaporation.



ADDITIONAL INVESTIGATIONS

Given the planned construction, the complexity of building on existing fill and the current stage of design, we believe further involvement by our firm is merited. We recommend the following additional investigations.

- 1. Review of plans;**
- 2. Construction testing and observation for site paving and utility backfill, and inspection of drilled pier installation.**

LIMITATIONS

Our borings were drilled to obtain a reasonably accurate estimate of subsurface conditions. The borings are representative of conditions encountered only at the exact boring locations. Variations in the subsoil conditions not indicated by the borings are likely. Compaction of fill, foundation installation and pavement construction should be observed and tested. We should also observe installation of drilled piers.

We believe this investigation was conducted in a manner consistent with that level of skill and care ordinarily used by geotechnical engineers practicing in this area at this time. No other warranty, express or implied, is made. If we can be of further


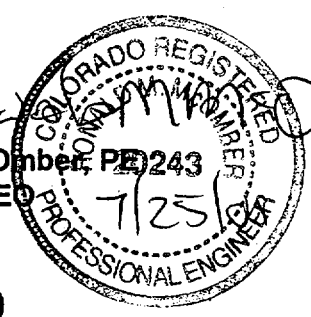


service in discussing the contents of this report, or in the analyzes of the influence of the subsoil conditions on design of the structure and pavements, please call.

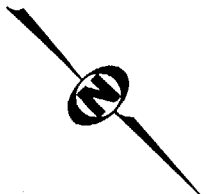
CTL/THOMPSON, INC.

Marva L. Jolly
Staff Engineer

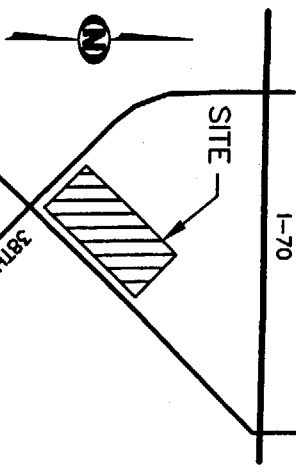
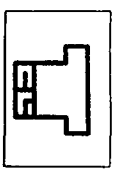
Reviewed by:


Ronald M. McOmber, PE 243
President & CEO

MLJ:RMM/ha
(5 copies sent)

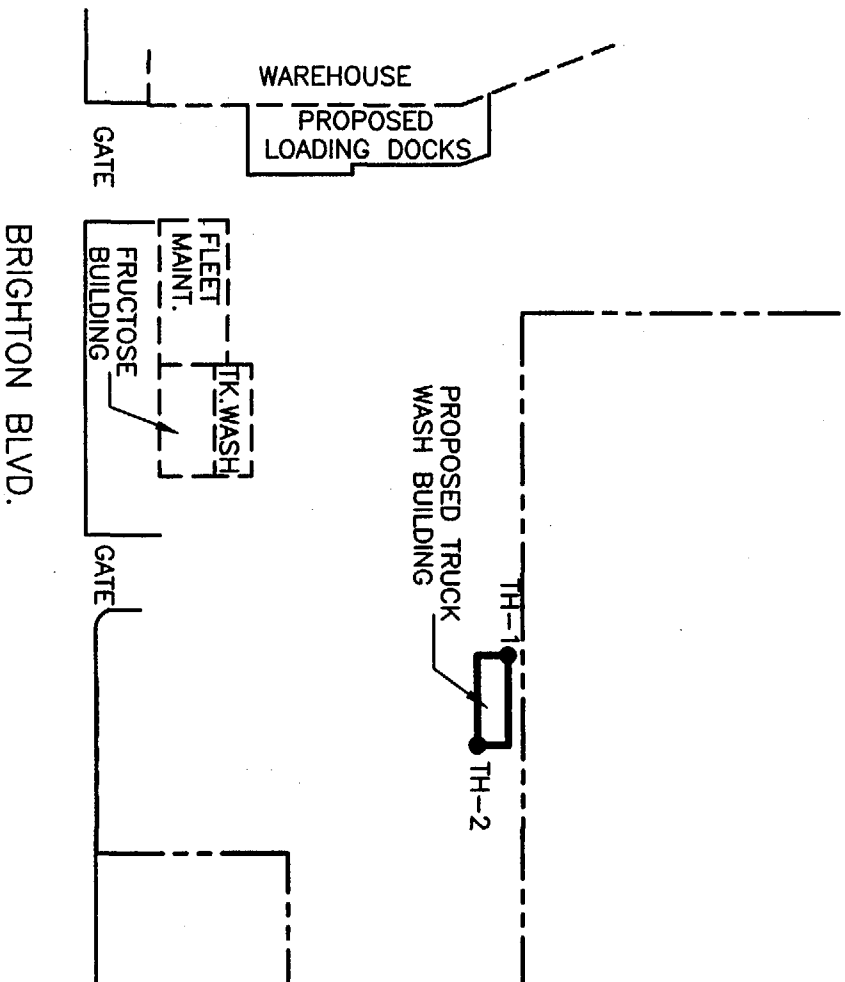
1 cc: Structural Consultants Inc.
3400 East Bayaud Avenue
Suite 300
Denver, Colorado 80209
Attn: Mr. Bruce R. Wolfe, PE



SCALE: 1"= 200'



VICINITY MAP
NO SCALE

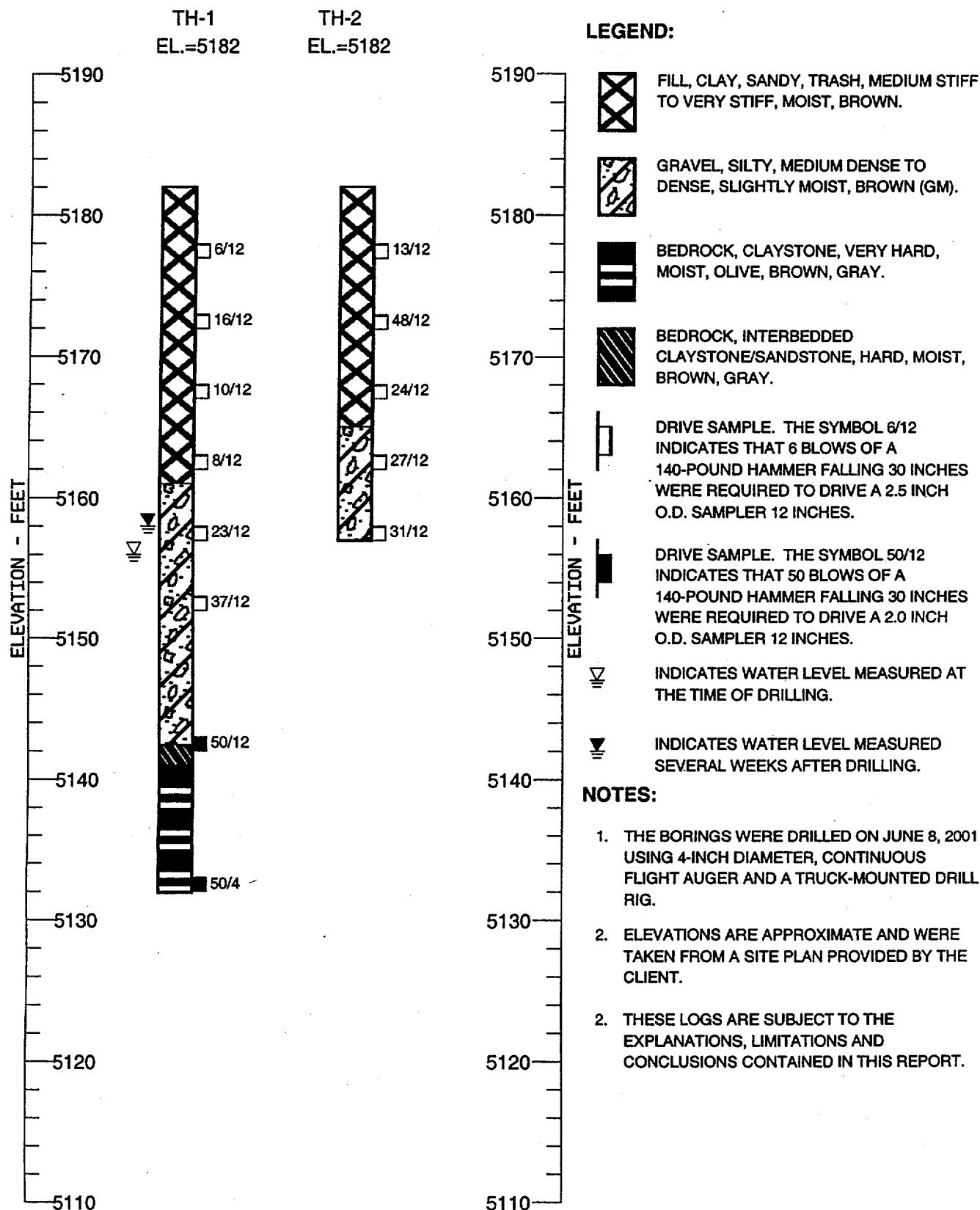


LEGEND:

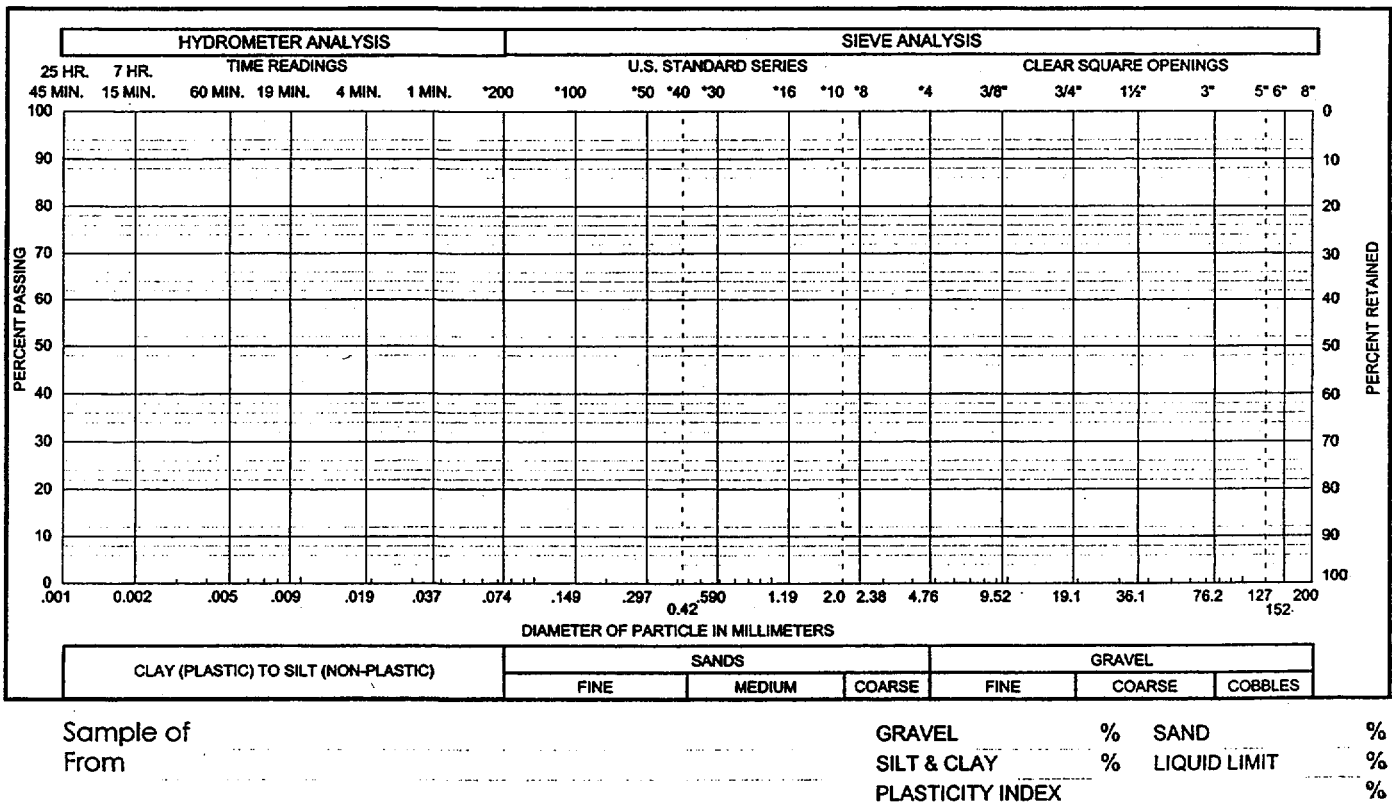
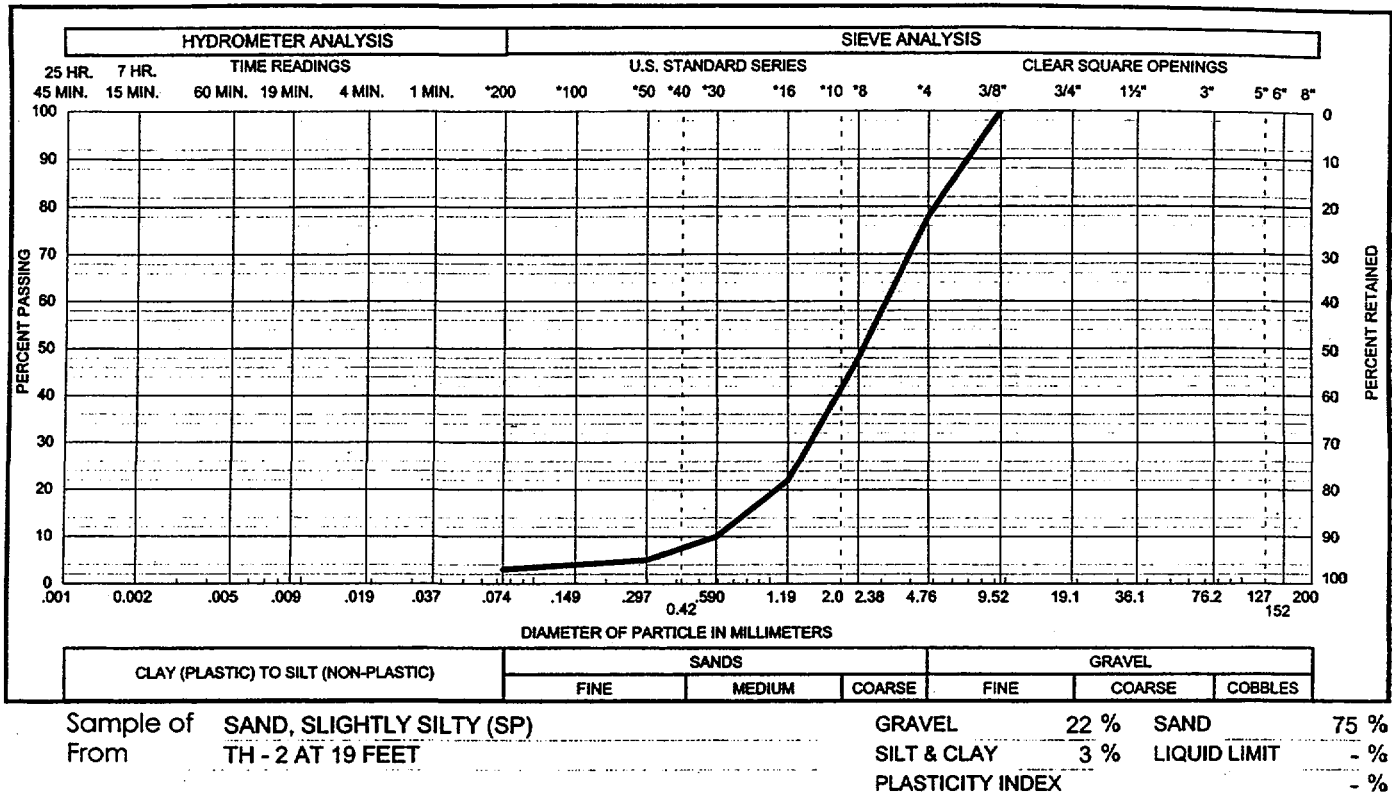
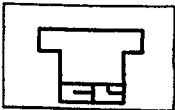
TH-1● INDICATES LOCATION OF EXPLORATORY BORINGS

Locations of Exploratory Borings

Pepsi Cola Company
Truck Wash Building
Job No. 33,290



SUMMARY LOGS OF EXPLORATORY BORINGS



Gradation Test Results

JOB NO. 33,290

FIG. 3

TABLE I

SUMMARY OF LABORATORY RESULTS

[illegible]